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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/811,194 03/26/2004		Paul A. Fleenor	HE0104A	2934	
21495 7	590 08/02/2004		EXAMINER		
	ABLE SYSTEMS LLC	LE, THAN	LE, THANH TAM T		
P O BOX 489 HICKORY, NC 28603			ART UNIT	PAPER NUMBER	
HICKOKI, N	C 28003		2839	THE DATE OF THE PARTY OF THE PA	
			DATE MAILED: 08/02/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application	on No.	Applicant(s)				
Office Action Summary		10/811,19	94	FLEENOR ET AL.				
		Examiner		Art Unit				
		Thanh-Ta		2839				
Period fo	The MAILING DATE of this communicati or Reply	on appears on the	cover sheet with the c	orrespondence ad	dress			
THE I - Exter after - If the - If NO - Failu Any r	ORTENED STATUTORY PERIOD FOR MAILING DATE OF THIS COMMUNICAT asions of time may be available under the provisions of 37 SIX (6) MONTHS from the mailing date of this communical period for reply specified above is less than thirty (30) day period for reply is specified above, the maximum statutory re to reply within the set or extended period for reply will, be reply received by the Office later than three months after the patent term adjustment. See 37 CFR 1.704(b).	FION. CFR 1.136(a). In no evolution. vs, a reply within the state y period will apply and within the apply statute, cause the app	ent, however, may a reply be tim story minimum of thirty (30) days Il expire SIX (6) MONTHS from ication to become ABANDONEI	nely filed s will be considered timel the mailing date of this co O (35 U.S.C. § 133).				
Status								
1)⊠	1) Responsive to communication(s) filed on <u>3-26-04</u> .							
2a)	This action is FINAL . 2b)	on-final.	·final.					
3) 🗌	Since this application is in condition for a	allowance except	for formal matters, pro	secution as to the	e merits is			
	closed in accordance with the practice u	nder <i>Ex parte Qu</i>	ayle, 1935 C.D. 11, 4 5	3 O.G. 213.				
Disposition of Claims								
4)⊠	4)⊠ Claim(s) <u>29-50</u> is/are pending in the application.							
	4a) Of the above claim(s) is/are withdrawn from consideration.							
5)	Claim(s) is/are allowed.							
6)⊠	6)⊠ Claim(s) <u>29-50</u> is/are rejected.							
·	Claim(s) is/are objected to.							
8)[_	8) Claim(s) are subject to restriction and/or election requirement.							
Applicati	on Papers							
9)☐ The specification is objected to by the Examiner.								
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.								
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority u	ınder 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).								
a) All b) Some * c) None of:								
1.☐ Certified copies of the priority documents have been received.								
2. Certified copies of the priority documents have been received in Application No								
3. Copies of the certified copies of the priority documents have been received in this National Stage								
	application from the International	Bureau (PCT Rul	e 17.2(a)).					
* See the attached detailed Office action for a list of the certified copies not received.								
				•				
Attachmen	t(s)							
1) Notice of References Cited (PTO-892)			4) Interview Summary					
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 			Paper No(s)/Mail Da 5) Notice of Informal P		O-152)			
Paper No(s)/Mail Date 6) Other:								

DETAILED ACTION

Claim Objections

1. Claims 33, 36, 40, 47 and 50 are objected to because of the following informalities:

Claim 33, lines 2 and 3; claim 40, lines 2 and 3 and claim 47, lines 2 and 3, "the plane" lacks an antecedent basis.

Claim 36, lines 2 and 3 and claim 50, line 2, "chamber" should be changed -- chamfer --.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

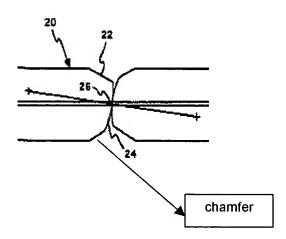
2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 29-33, 36-40, 43-47 and 50 are rejected under 35 U.S.C. 102(b) as being anticipated by Lurie et al. (5,351,327).

Regarding claims 29-30, 37-38 and 44, Lurie et al., figure 2, disclose a ferrule (20) comprising: a ferrule body extending lengthwise between opposed front and rear faces to define a longitudinal axis (28). The ferrule body defining a lengthwise extending bore capable of receiving an end portion of an optical fiber and a chamfer (see a figure below), the chamfer being adjacent to the front face. Wherein the front

face of the ferrule body including a compound surface having a ground portion (24) and an unground portion (22), the bore opens through a hemispherical ground portion.



Regarding claims 31, 39 and 45, the ground/unground portion is rearward of the unground/ground portion (depends on which direction, from the top to the bottom or from the bottom to the top)

Regarding claims 32 and 46, the unground portion is a plateau.

Regarding claims 33, 40 and 47, a plane coincident with the bore is disposed at an offset angle to a plane perpendicular to the longitudinal axis.

Regarding claims 36, 43 and 50 the ferrule body including a chamfer (see a figure above) and the unground portion is disposed proximate to the chamfer.

Application/Control Number: 10/811,194 Page 4

Art Unit: 2839

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 34-35, 41-42 and 48-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lurie et al. (5,351,327).

Lurie et al. disclose the instant claimed invention as described above except for the plane coincident with the bore is disposed at an offset angle of between about 8 and about 12 degrees relative to the plane perpendicular to the longitudinal axis, and the unground portion extends across less than 50% of the front face of the ferrule body.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Lurie et al. to have the plane coincident with the bore is disposed at an offset angle of between about 8 and about 12 degrees relative to the plane perpendicular to the longitudinal axis, and the unground portion extends across less than 50% of the front face of the ferrule body, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233, in order to easily polish the fiber.

Application/Control Number: 10/811,194 Page 5

Art Unit: 2839

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh-Tam T. Le whose telephone number is 571-272-2094. The examiner can normally be reached on 7:30-5:00.

- 7. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on 571-272-2092. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.
- 8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TL. 7/28/04.

T. Le